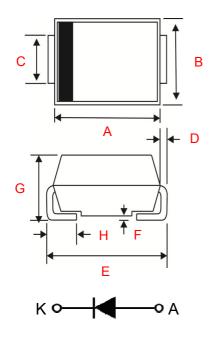
Surface Mount Schottky Barrier Rectifier

Package Outline Dimensions (millimeters)



| SMC (DO-214AB) | | | |
|------------------------------|------|------|--|
| Dim. | Min. | Max. | |
| Α | 6.60 | 7.11 | |
| В | 5.59 | 6.22 | |
| С | 2.75 | 3.18 | |
| D | 0.15 | 0.31 | |
| Е | 7.75 | 8.13 | |
| F | | 0.20 | |
| G | 2.00 | 2.50 | |
| Н | 0.76 | 1.52 | |
| All Dimensions in millimeter | | | |

Features

- · High Current Capability
- · Low Switching Noise
- · High Surge Capability
- · Low Power Loss & High Efficiency
- Guard Ring Protection
- Pd-free lead plating & Halogen-free part

Mechanical

- Molded Plastic Low profile SMC (DO-214AB)
- Plastic materials used carries underwriters laboratory flammability classification 94V-0
- Lead Temperature for Soldering Purposes : 265°C Max. for 10 Seconds
- Device Weight: 0.007 ounces (0.226 grams)

Maximum Ratings & Electrical Characteristics (TA = 25°C unless otherwise specified)

| Parameter | Symbol | SK310C | SK315C | SK320C | Units |
|--|--------------------|--------|--------|--------|-------|
| Marking Code | | SK310 | SK315 | SK320 | Units |
| DC Blocking Voltage | V_{RM} | 100 | 150 | 200 | |
| Working Peak Reverse Voltage | V_{RWM} | 70 | 105 | 140 | Volts |
| Peak Repetitive Reverse Voltage | V_{RRM} | 100 | 150 | 200 | |
| Average Rectified Forward Current | | 3 | | Amps | |
| (Rated VR-20Khz Square Wave) - 50% duty cycle | I _{F(AV)} | | | | |
| Non-Repetitive Peak Forward Surge Current | | 80 | | | Amps |
| (Surge applied at rated load conditions half wave, single phase, 60Hz) | I _{FSM} | ou | | | |
| Instantaneous Forward Voltage $I_F = 3A$, $T_A = 25^{\circ}C$ | V_{F} | 0.85 | 0.87 | 0.9 | Volts |
| Instantaneous Reverse Current $V_R = V_{RRM}$, $T_A = 25^{\circ}C$ | _ | 0.5 | | A | |
| $V_R = V_{RRM}$, $T_A = 100^{\circ}C$ | I _R | | 20.0 | | mA |
| Total Capacitance $V_R = 4V$, $f = 1MHz$ | C_T | | 400 | | pF |

NOTE: 1.FR-4 PCB, 2 oz Copper. Minimum recommended pad layout

2.Polymide PCB, 2 oz Copper. Cathode pad dimensions 18.8x14.4mm, Anode pad dimensions 5.6x14.4mm

Thermal Characteristics (T_A = 25°C unless otherwise specified)

| Parameter | | l Value | Units |
|--|---------------------------|--------------|--------|
| Maximum Thermal Resistance Junction to 1 | Terminal Rθ _{JT} | 10 | °C / W |
| Operating & Storage Junction Temperature | T _J | 150 | °C |
| Operating & Storage Junction Temperature | T _{STG} | - 65 to +150 | |

Ratings and Characteristics Curves (T_A = 25°C unless otherwise specified)

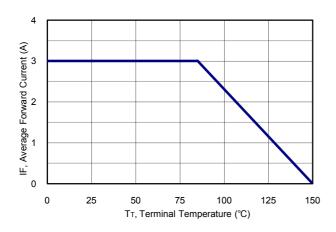


Figure 1: Current Derating Curves

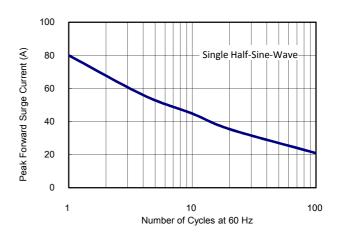


Figure 2: Peak Forward Surge Current

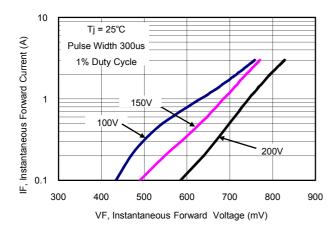


Figure 3: Typical Forward Characteristics

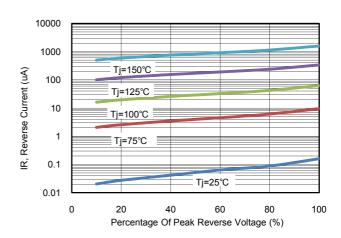
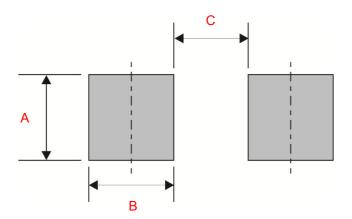


Figure 4: Typical Reverse Characteristics

Suggested Pad Layout



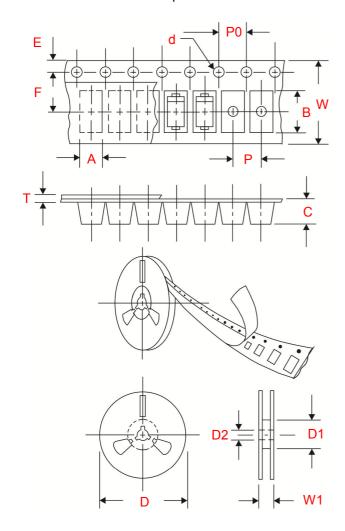
| SMC (DO-214AB) | | |
|------------------------------|------------|--|
| Symbol | Dimensions | |
| Α | 3.30 | |
| B 2.50 | | |
| С | 4.40 | |
| All Dimensions in millimeter | | |

Ordering information

| | Part Number | Package | Delivery mode |
|---|--------------------|----------------|-------------------------|
| Ī | SK310C THRU SK320C | SMC (DO-214AB) | 3,000 pieces / 13" Reel |

Tape and Reel Dimensions (millimeters)

Surface Mount Device are packed in accordance with EIA standard RS-481-D and specification.



| Item | Symbol | Dimensions (mm) | | |
|-----------------------|--------|-----------------|--|--|
| пеш | | SMC (DO-214AB) | | |
| Carrier width | Α | 6.15 ± 0.1 | | |
| Carrier length | В | 8.2 ± 0.1 | | |
| Carrier depth | С | 2.7 ± 0.1 | | |
| Sprocket hole | d | 1.5 ± 0.1 | | |
| Reel outside diameter | D | 330.0 ± 1.0 | | |
| Reel inner diameter | D1 | 72.0 ± 1.0 | | |
| Feed hole diameter | D2 | 13.0 ± 1.0 | | |
| Stocket hole position | E | 1.75 ± 0.1 | | |
| Punch hole position | F | 5.5 ± 0.1 | | |
| Punch hole pitch | Р | 8.0 ± 0.1 | | |
| Sprocket hole pitch | P0 | 4.0 ± 0.1 | | |
| Totall tape thickness | T | 0.3 ± 0.1 | | |
| Tape width | W | 16.0 ± 0.3 | | |
| Reel width | W1 | 22.0 ± 1.5 | | |

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